REMARKS

In the aforementioned Office Action, the Examiner objected to an informality in the specification and drawing and rejected pending claims 1-15. In this response, the specification has been amended. Claims 1-15 have not been amended and are resubmitted for the Examiner's reconsideration for the reasons stated below.

Objection to the Drawing and Specification

In the aforementioned Office Action, the specification and/or drawing was objected to under 37 C.F.R. § 1.84(p)(5) as including reference numeral in the drawing not mentioned in the specification.

Applicants appreciate the Examiner's keen observation. By this amendment, paragraph [1064] has been amended and is now believed to be consistent with Fig. 6 as originally filed. In addition, a typographical error has been amended in paragraph [1045]. No new matter is involved. Entry of the specification as amended is respectfully requested.

Claim Rejections – 35 USC § 103

Claims 1, 7-9, and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Szczutkowski et al.* (U.S. Patent No. 4,757,536) in view of *Kolze et al.* (U.S. Patent No. 6,285, 681), and further in view of *Mahany* (U.S. Patent No. 6,018,555).

To begin with, Applicant's claimed invention concerns with sending preamble and regular traffic information in separate channels. Such arrangement is clearly reflected in, for example, in claim 1 which recites an apparatus, *inter alia*, for "decoding a preamble channel" in the claim preamble and further the "the preamble channel" in the claim body. Nowhere in *Szczutkowski et al., Lolze et al. or Mahany* can there be found of any isolated and dedicated channels used to carry only the preamble information. Instead, in all the cited references, each

teaches conveying information in one channel carrying both the preamble and core data. As such, the suggested combination, if at all possible, does not meet Applicants' claims.

More specifically, claim 1 recites, the apparatus as including "a plurality of preamble size detection elements for determining a number of slots occupied by a preamble sequence on the preamble channel." There is no such preamble channel in any of the cited references as mentioned above. Furthermore, in the cited references, the data packet frames carrying the preambles are not partitioned into slots, as in for example, in a CDMA system where data traffic can be transported in packet and subpackets that occupy slots (e.g., see page 7, paragraph [1024] of Applicants' disclosure). As such, there are no such detection elements in any of the cited references, much less that each of the detection elements "outputs a potential preamble sequence and a best path metric," as claimed in claim 1.

In the rejection, the twin antennas switching assembly of *Mahany* is equated with "a plurality of preamble size detection elements" of Applicants' claim 1. However, detailed study of *Mahany*, especially the paragraphs cited by the Examiner (column 2, lines 30-35, column 9, lines 48-54, and column 11, lines 54-59 of *Mahany*) reveals that *Mahany* merely teaches switching to another antenna if the reception of the preamble in the data packet of the current antenna cannot be identified. *Mahany* is silent with respect to "preamble size detection," much less "determining a number of slots occupied by a preamble sequence" as claimed by Applicants. The antenna switching arrangement of *Mahany* is not and cannot be construed as "a plurality of preamble size detection elements."

If that is not enough, Applicant's claim 1 specifically recites "a selection element for choosing a true preamble sequence." There is no such selection element in any of the cited references. Instead, in each reference, there is only one preamble sequence with no additional choices for selection.

With a claim limitation not found in the prior art, a *prima facie* case of obviousness cannot be established. MPEP § 2143.03. Here, multiple features as aforementioned are lacking in the suggested combination. Accordingly, claim 1 is not rendered obvious by the prior art.

Claims 7 and 8 are dependent claims dependent on claim 1. Claim 1 is submitted to be patentable as set forth above. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ.2d 1596 (Fed. Cir. 1988). Accordingly, dependent claims 7 and 8 are also submitted to be patentable over the prior art.

As for claims 9 which recites the method that includes "de-interleaving over one slot of the preamble channel to form a first deinterleaved sequence." As previously explained, there are neither dedicated preamble channels nor preamble channel slots taught in any of the cited references. Along the same line of reasoning, for the same reasons as stated above, the resultant combination, even if strainedly combined, does not meet Applicants' claim 9.

In the rejection, the Examiner conceded that *Szczutkowski et al.* does not disclose any soft-combining feature, nevertheless, the Examiner took official notice that soft-combining a de-interleaved sequence is well known.

Evidence generally notorious or capable of instant and unquestionable demonstration as well known can be taken as official notice. *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (C.C.P.A. 1970). However, an applicant has the right to demand showing of evidence as officially noticed. *In re Chevenard*, 139 F.2d 71, 60 USPQ 239, 241 (C.C.P.A. 1943). Failure to challenge the fact so noticed constitutes a waiver. *In re Sun*, 31 USPQ.2d 1451, 1455 (Fed Cir. 1993).

Here, Applicants' claim 9 recites the step of soft-combing. As a result of the soft-combining the redundantly transmitted data sequences, accurate data decoding can be made possible, even in the face of adverse transmission conditions generating corrupted data. The consequential benefit of accurate preamble decoding allows subsequent accurate acquisition of core data. Contrary to the Examiner's position, Applicants submit that such soft-combining as claimed in claim 9 would have been nonobvious and is not generally notorious or capable of instant and unquestionable demonstration. Accordingly, pursuant to 35 C.F.R. § 1.104(d)(2), Applicants respectfully traverse the Examiner's officially noticed statement and request demonstration of such evidence.

With regard to the rejection of claim 14, which is a means-plus-function recitation of claim 9 in accordance with 35 U.S.C. § 112 ¶ 6, with full support in the specification, claim 14 is submitted to be patentable for the same reasons that claim 9 is believed to be patentable.

In the rejection, claims 2-6, 10-13 and 15 were also rejected under 35 U.S.C. § 103(a) as unpatentable over *Szczutkowski et al.*, in view of *Lolze et al.* and further in view of *Mahany*.

Claims 2-6 are dependent claims dependent on claim 1. Claim 1 is submitted to be patentable as set forth above. Each of claims 2-6 includes at least one additional limitation on the top of the limitations recited in claim 1, and is submitted to be, *a fortiori*, patentable over the prior art.

Likewise, claims 10-12 are dependent claims dependent directly or indirectly on claim 9. Claim 9 is submitted to be patentable as stated above. Dependent claims 10-12 are therefore submitted to be even more patentable over the cited prior art.

As for independent claim 13, it is basically variant recitation of independent claim 9 and with substantially the same limitations, is submitted to be patentable for the same reasons that claim 9 is believed to be patentable.

Claim 15 is a means-plus-function recitation of claim 9 in accordance with 35 U.S.C. § 112 ¶ 6 and with full support in the specification, is submitted to be patentable for the same reasons that claim 9 is believed to be patentable.

In light of the foregoing, Applicants respectfully submit that claims 1-15 are patentable over the prior art. Withdrawal of the rejection on these claims is believed to be in order and is respectfully requested.

Notwithstanding the overwhelming reasons in support of patentability of claims 1-15 as stated above, Applicants further respectfully submit that in the rejection, the Examiner basically used Applicants claimed invention as a "template," picked and chose various features out of context from the prior art references so as to arrive at the suggested combination, where there is no express or implied justification for such combination. Nor is there any objective rationale provided other than the conclusory statements out of hindsight gleaned from Applicants' disclosure. Respectfully, it needs to point out that such practice is impermissible for rejecting claims based on obviousness. *In re Gorman*, 933 F.2d 982, 987, 18 USPQ.2d 1885, 1888 (Fed. Cir. 1991)

For the foregoing reasons, the rejection of claims 1-15 under 35 U.S.C. § 103(a) cannot be sustained and the Examiner's rejection should be withdrawn.

CONCLUSION

In light of the above remarks, Applicants respectfully submit that claims 1-15 are distinguishably patentable over the prior art. With the amendment in the specification, the application is believed to be in condition for allowance. Reconsideration and an early allowance are respectfully requested.

Respectfully submitted,

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Kam T. Fam, Reg. No. 35,756
(858) 651-5563

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 658-5787
Facsimile: (858) 658-2502